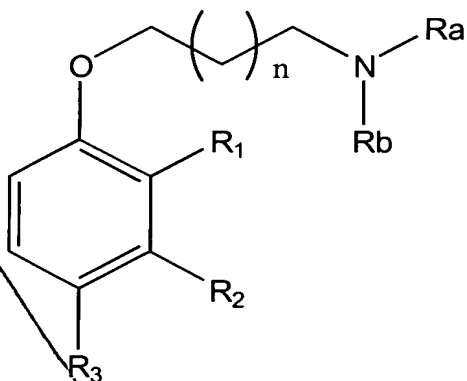


5

CLAIMS

1. A compound of formula (I):



wherein R_a and R_b are independently C₁₋₈ alkyl, C₃₋₈ alkenyl, C₃₋₈ cycloalkyl,

(C₃₋₈ cycloalkyl) C₁₋₆ alkyl, or taken together with the nitrogen to which they are attached form a 4-7 membered heterocyclyl optionally including up to 3 additional heteroatoms;

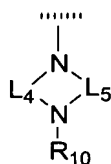
n is 0-4;

one of R₁, R₂, and R₃ is G, and the remaining two are hydrogen or halo;

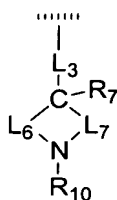
G is a nitrogen-containing group selected from one of the following:

-OL₁Q, -L₂Q, -N(L₁Q)R₅, -L₃C(L₁Q)R₆R₇, -C(L₁Q)R₆R₇,

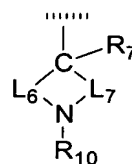
Sub
A
cont.
5



(i)



(ii)



(iii)

wherein:

L₁ is C₂₋₆ alkylene, C₃₋₈ cycloalkylene, C₄₋₆ alkenylene, C₄₋₆ alkynylene, C₂₋₅ alkanoyl, (phenyl)C₁₋₆ alkylene, (naphthyl)C₁₋₆ alkylene, (C₂₋₅ heteroaryl)C₁₋₆ alkylene, (phenoxy)C₁₋₆ alkylene, or (C₂₋₅ heteroaryloxy)C₁₋₆ alkylene;

L₂ is C₁₋₆ alkylene, C₃₋₈ cycloalkylene, C₃₋₆ alkenylene, C₃₋₆ alkynylene, C₂₋₅ alkanoyl, (phenyl)C₁₋₆ alkylene, (naphthyl)C₁₋₆ alkylene, (C₁₋₅ heteroaryl)C₁₋₆ alkylene, (phenoxy)C₁₋₆ alkylene, (C₁₋₅ heteroaryloxy)C₁₋₆ alkylene, or (C₁₋₅ heteroarylthio)C₁₋₆ alkylene;

L₃ is C₁₋₆ alkylene, C₂₋₆ alkenylene, C₂₋₆ alkynylene, C₂₋₅ alkanoyl, (phenyl)C₁₋₆ alkylene, phenyl, naphthyl, (naphthyl)C₁₋₆ alkylene, C₁₋₅ heteroaryl)C₁₋₆ alkylene, (phenoxy)C₁₋₆ alkylene, (C₁₋₅ heteroaryloxy)C₁₋₆ alkylene, or C₂₋₅ heteroaryl;

L₄ is C₁₋₅ alkylene;

L₅ is C₁₋₅ alkylene;

L₆ is C₁₋₅ alkylene;

5

L_7 is C_{1-5} alkylene or absent;

Q is $-NR_8R_9$ or a non-aromatic C_{2-15} heterocyclyl ring system containing at least one nitrogen atom and optionally between 1 and 3 additional heteroatoms selected from O, S, and N in each ring;

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each of R_5 and R_6 is independently selected from hydrogen, C_{1-8} alkyl, C_{2-8} alkenyl, C_{3-7} cycloalkyl, $(C_{3-7}$ cycloalkyl) C_{1-6} alkylene, C_{2-15} heterocyclyl, and $(C_{2-7}$ heterocyclyl) C_{1-6} alkylene;

15

R_7 is H, hydroxyl, halo, C_{2-6} alkoxy or absent where the carbon linking L_6 and L_7 (or bonded to R_6) participates in a double bond;

20

each of R_8 and R_9 is independently selected from hydrogen, C_{1-8} alkyl, C_{3-8} alkenyl, C_{3-7} cycloalkyl, $(C_{3-7}$ cycloalkyl) C_{1-6} alkylene, C_{2-15} heterocyclyl, phenyl, $(C_{2-15}$ heterocyclyl) C_{1-6} alkylene, and (phenyl) C_{1-6} alkylene;

R_{10} is H, C_{1-8} alkyl, C_{3-8} alkenyl, C_{3-7} cycloalkyl, $(C_{3-7}$ cycloalkyl) C_{1-6} alkylene, $(C_{2-15}$ heterocyclyl) C_{1-6} alkylene, or (phenyl) C_{1-6} alkylene;

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wherein each of the above alkyl, alkylene, alkenyl, alkenylene, alkynyl, alkynylene, heterocyclyl, cycloalkyl, and aryl groups may each be independently and optionally substituted with between 1 and 3 substituents selected from halo, amino, nitro, hydroxyl, and C_{1-3} alkyl;

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wherein substituents of Q can be further selected from carboxamide, C_{2-6} alkyl, C_{1-8} heterocyclyl, $N(C_{1-6}$ alkyl)(C_{1-8} heterocyclyl), $NH(C_{1-8}$ heterocyclyl), $(C_{1-8}$ heterocyclyl) C_{1-3} alkylene, $O(C_{1-8}$ heterocyclyl), C_{1-6} alkoxy, (phenyl) C_{3-6} cycloalkyl-O-, phenyl, (phenyl) C_{1-3} alkylene, $N(C_{1-6}$

alkyl)[(phenyl) C_{1-3} alkylene], and (phenyl) C_{1-3} alkylene-O- where each of above heterocyclyl, phenyl, and alkyl groups may be optionally substituted with from 1 to 3 substituents independently selected from halogen, nitro, cyano, and C_{1-3} alkyl;

10 or a pharmaceutically acceptable salt, ester, or amide thereof.

2. A compound of claim 1, wherein NR_aR_b taken together form piperidyl, methylpiperidyl, dimethylamino, pyrrolidinyl, diethylamino, methylethylamino, ethylpropylamino, or dipropylamino.
3. A compound of claim 2, wherein NR_aR_b taken together form piperidyl, pyrrolidinyl, or diethylamino.
4. A compound of claim 3, wherein NR_aR_b taken together form piperidyl or pyrrolidinyl.
5. A compound of claim 1, wherein one of R_2 and R_3 is G.
6. A compound of claim 5, wherein R_2 is G.
7. A compound of claim 5, wherein R_3 is G.
8. A compound of claim 1, wherein n is between 1 and 4, inclusive.
9. A compound of claim 8, wherein n is 1.
10. A compound of claim 1, wherein L_1 is C_{2-3} alkylene.

- 5 11. A compound of claim 1, wherein L_2 is C_{1-6} alkylene, (C_{1-5} heteroaryl) C_{1-6} alkylene, or -phenyl- C_{1-6} alkylene.
12. A compound of claim 11, wherein L_2 is methylene.
- 10 13. A compound of claim 1, wherein L_3 is ethylene, vinylene, ethynylene, and phenylene.
14. A compound of claim 1, wherein Q is a non-aromatic nitrogen-containing C_{2-5} heterocyclyl.
15. A compound of claim 14, wherein Q is selected from piperidyl, N-(C_{1-6} alkyl)piperazinyl, piperazinyl, pyrrolinyl, pyrrolidinyl, and morpholinyl.
- 20 *Sub* 16. A compound of claim 14, wherein Q is N-morpholinyl or N-piperidinyl, optionally substituted with between 1 and 3 substituents selected from hydroxyl, carboxamide, C_{1-6} alkyl, C_{1-8} heterocyclyl, N(C_{1-6} alkyl)(C_{1-8} heterocyclyl), NH(C_{1-8} heterocyclyl), (C_{1-8} heterocyclyl) C_{1-3} alkylene, C_{1-8} heterocyclyl-O-, C_{1-6} alkoxy, (C_{3-6} cycloalkyl)-O-, phenyl, (phenyl) C_{1-3} alkylene, N(C_{1-6} alkyl)[(phenyl) C_{1-3} alkylene, and (phenyl) C_{1-3} alkylene-O- where each of above heterocyclyl, phenyl, and alkyl groups may be optionally substituted with from 1 to 3 substituents independently selected from halogen, nitro, cyano, and C_{1-3} alkyl.
- 25 17. A compound of claim 16, wherein Q is substituted with a substituent comprising a C_{1-6} heterocyclyl group selected from: pyridyl, pyrimidyl, furyl, thiofuryl, imidazolyl, (imidazolyl) C_{1-6} alkylene, oxazolyl, thiazolyl, 2,3-dihydro-indolyl, benzimidazolyl, 2-oxobenzimidazolyl,
- 30

- 5 (tetrazolyl)C₁₋₆ alkylene, tetrazolyl, (triazolyl)C₁₋₆ alkylene, triazolyl, (pyrrolyl)C₁₋₆ alkylene, and pyrrolyl.
18. A compound of claim 17, wherein Q is a substituted or unsubstituted N-morpholinyl.
- 10 19. A compound of claim 1, wherein Q is NR₈R₉ wherein each of R₈ or R₉ is independently selected from hydrogen, C₁₋₈ alkyl, C₃₋₈ alkenyl, C₃₋₇ cycloalkyl, (C₃₋₇ cycloalkyl)C₁₋₆ alkylene, C₂₋₅ heterocyclyl, phenyl, (C₂₋₅ heterocyclyl)C₁₋₆ alkylene, and (phenyl) C₁₋₆ alkylene.
20. A compound of claim 19, wherein one of R₈ and R₉ is hydrogen.
21. A compound of claim 20, wherein R₈ is H and R₉ is phenyl or aromatic C₁₋₈ heterocyclyl optionally substituted with 1-3 substituents selected from halo, nitro, cyano, and C₁₋₃ alkyl.
22. A compound of claim 21, wherein R₉ is phenyl, pyridyl, pyrimidyl, furyl, thiofuryl, imidazolyl, (imidazolyl)C₁₋₆ alkylene, oxazolyl, thiazolyl, 2,3-dihydro-indolyl, benzimidazolyl, 2-oxobenzimidazolyl, (tetrazolyl)C₁₋₆ alkylene, tetrazolyl, (triazolyl)C₁₋₆ alkylene, triazolyl, (pyrrolyl)C₁₋₆ alkylene, and pyrrolyl.
23. A compound of claim 20, wherein NR_aR_b taken together form piperidyl, methylpiperidyl, dimethylamino, pyrrolidinyl, diethylamino, methylethylamino, ethylpropylamino, or dipropylamino.
24. A compound of claim 22, wherein NR_aR_b taken together form piperidyl, pyrrolidinyl, or diethylamino.

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25. A compound of claim 20, wherein n is 1.
26. A compound of claim 1, wherein G is selected from:
- (4) formula (i) wherein L_4 and L_5 are independently selected from C_{2-3} alkylene,
- (5) formula (iii) wherein L_6 is C_{2-3} alkylene and L_7 is C_{2-3} alkylene or absent,
- (6) L_2Q wherein L_2 is C_{1-6} alkylene, phenyl C_{1-4} alkylene, or (aromatic C_{1-5} heterocyclyl) C_{1-4} alkylene, and
- (7) OL_1Q wherein L_1 is C_{2-3} alkylene.
27. A compound of claim 26, wherein G is selected from:
- (8) formula (i) wherein L_4 and L_5 are each C_2 alkylene,
- (9) formula (iii) wherein each of L_6 and L_7 is C_2 alkylene, and
- (10) L_2Q wherein L_2 is methylene.
28. A compound of claim 27, wherein G is L_2Q .
29. A compound of claim 26, wherein R_{10} is H, branched C_{3-6} alkyl, or benzyl.
30. A compound of claim 29, wherein R_{10} is isopropyl or benzyl.
31. A compound of claim 26, wherein Q is a non-aromatic C_{2-5} heterocyclyl.
32. A compound of claim 31, wherein Q is selected from piperidyl, N-(C_{1-6} alkyl)piperazinyl, piperazinyl, pyrrolinyl, pyrrolidinyl, and morpholinyl.

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33. A compound of claim 27, wherein Q is a non-aromatic C₂₋₅ heterocyclyl.

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34. A compound of claim 33, wherein Q is selected from piperidyl, N-(C₁₋₆ alkyl)piperazinyl, piperazinyl, pyrrolinyl, pyrrolidinyl, and morpholinyl.

35. A compound of claim 34, wherein Q is selected from piperidyl, N-(C₁₋₆ alkyl)piperazinyl, piperazinyl, pyrrolinyl, pyrrolidinyl, and morpholinyl.

36. A compound of claim 28, wherein NR_aR_b taken together form piperidyl, pyrrolidinyl, or diethylamino.

37. A compound of claim 26, wherein n is 1.

38. A compound of claim 25, wherein R₇ is hydroxyl, halo, or absent where one of L₆ and L₇ provides a double bond to the carbon atom to which R₆ and R₇ are attached.

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39. A compound of claim 19, selected from: Methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-(2-pyridin-2-yl-ethyl)-amine, Benzyl-methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Methyl-(1-methyl-piperidin-4-yl)-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Ethyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-pyridin-4-ylmethyl-amine, [2-(3,4-Dimethoxy-phenyl)-ethyl]-methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Methyl-phenethyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Dimethyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Dimethyl-{2-[4-(3-piperidin-1-yl-propoxy)-phenoxy]-ethyl}-amine, Methyl-phenethyl-[3-(3-piperidin-1-yl-

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- 5 propoxy)-benzyl]-amine, and Dibenzyl-(3-{2-[4-(3-piperidin-1-yl-propoxy)-phenyl]-pyrrol-1-yl}-propyl)-amine.
40. A compound of claim 19, selected from: Indan-1-yl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Cyclohexyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Cyclopropyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Pyridin-2-yl-[4-(3-pyrrolidin-1-yl-propoxy)-benzyl]-amine, [4-(3-Piperidin-1-yl-propoxy)-benzyl]-pyridin-2-yl-amine, Phenyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, [3-(3-Piperidin-1-yl-propoxy)-benzyl]-pyridin-2-yl-amine, (4-Chloro-phenyl)-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, and (4-Chloro-phenyl)-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine.
41. A compound of claim 1, selected from: 4-[3-(3-Piperidin-1-ylmethylphenoxy)-propyl]-morpholine, 1-[3-(4-Piperidin-1-ylmethylphenoxy)-propyl]-piperidine, Benzyl-methyl-{1-[4-(3-piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-amine, 1-[3-(4-Piperidin-1-ylmethylphenoxy)-propyl]-decadeuterio-piperidine, 1-(3-[4-[5-(3-Piperidin-1-yl-propylsulfanyl)-tetrazol-1-yl]-phenoxy]-propyl)-piperidine, 1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-ol, 4-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-morpholine, 2-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-1,2,3,4-tetrahydro-isoquinoline, {1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-pyridin-2-yl-amine, 1-Benzyl-4-[4-(3-piperidin-1-yl-propoxy)-benzyl]-piperazine, Indan-1-yl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Cyclohexyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Cyclopropyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, 8-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-1,4-dioxa-8-aza-spiro[4.5]decane, 1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-piperidine-4-carboxylic acid amide, Methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-(2-pyridin-2-yl-ethyl)-

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5 yl}-2,3-dihydro-1H-indole, 1-Isopropyl-4-[4-(3-piperidin-1-yl-propoxy)-
benzyl]-piperazine, 1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-
azacyclotridecane, 1-Methyl-4-[4-(3-piperidin-1-yl-propoxy)-benzyl]-
piperazine, 5-Bromo-1-{1-[4-(3-piperidin-1-yl-propoxy)-benzyl]-
piperidin-4-yl}-2,3-dihydro-1H-indole, Methyl-phenethyl-[3-(3-piperidin-
10 1-yl-propoxy)-benzyl]-amine, 2-{1-[3-(4-Piperidin-1-ylmethyl-phenoxy)-
propyl]-piperidin-2-yl}-ethanol, 4-[3-(4-Piperidin-1-ylmethyl-phenoxy)-
propyl]-morpholine, 2-[4-(2-Piperidin-1-yl-ethoxy)-benzyl]-1,2,3,4-
tetrahydro-isoquinoline, Pyridin-2-yl-[4-(3-pyrrolidin-1-yl-propoxy)-
benzyl]-amine, 1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-1,2,3,4-
15 tetrahydro-quinoline, [4-(3-Piperidin-1-yl-propoxy)-benzyl]-pyridin-2-yl-
amine, 1-[2-(4-Piperidin-1-ylmethyl-phenoxy)-ethyl]-piperidine,
Dibenzyl-(3-{2-[4-(3-piperidin-1-yl-propoxy)-phenyl]-pyrrol-1-yl}-propyl)-
amine, Dimethyl-[3-(4-piperidin-1-ylmethyl-phenoxy)-propyl]-amine,
Phenyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, [3-(3-Piperidin-1-yl-
20 propoxy)-benzyl]-pyridin-2-yl-amine, 5-(3-Piperidin-1-yl-propoxy)-2-[4-
(3-piperidin-1-yl-propoxy)-phenyl]-pyrimidine, (4-Chloro-phenyl)-[4-(3-
piperidin-1-yl-propoxy)-benzyl]-amine, 1-Methyl-4-[3-(4-piperidin-1-
ylmethyl-phenoxy)-propyl]-piperazine, 1-[4-(2-Piperidin-1-yl-ethoxy)-
benzyl]-1,2,3,4-tetrahydro-quinoline, (4-Chloro-phenyl)-[3-(3-piperidin-
25 1-yl-propoxy)-benzyl]-amine.

43. A compound of claim 1, selected from: 4-[3-(3-Piperidin-1-ylmethyl-
phenoxy)-propyl]-morpholine, 1-[3-(4-Piperidin-1-ylmethyl-phenoxy)-
propyl]-piperidine, Benzyl-methyl-{1-[4-(3-piperidin-1-yl-propoxy)-
30 benzyl]-piperidin-4-yl}-amine, 1-[3-(4-Piperidin-1-ylmethyl-phenoxy)-
propyl]-decadeuterio-piperidine, 1-(3-{4-[5-(3-Piperidin-1-yl-
propylsulfanyl)-tetrazol-1-yl]-phenoxy}-propyl)-piperidine, 1-[4-(3-
Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-ol, 4-[4-(3-Piperidin-1-yl-

5 propoxy)-benzyl]-morpholine, 2-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-
 1,2,3,4-tetrahydro-isoquinoline, {1-[4-(3-Piperidin-1-yl-propoxy)-
 benzyl]-piperidin-4-yl}-pyridin-2-yl-amine, 1-Benzyl-4-[4-(3-piperidin-1-
 yl-propoxy)-benzyl]-piperazine, Indan-1-yl-[4-(3-piperidin-1-yl-propoxy)-
 benzyl]-amine, Cyclohexyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine,
 10 Cyclopropyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, 8-[4-(3-
 Piperidin-1-yl-propoxy)-benzyl]-1,4-dioxo-8-aza-spiro[4.5]decane, 1-[4-
 (3-Piperidin-1-yl-propoxy)-benzyl]-piperidine-4-carboxylic acid amide,
 Methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-(2-pyridin-2-yl-ethyl)-
 amine, Benzyl-methyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, 4-
 15 Phenyl-1-[4-(3-piperidin-1-yl-propoxy)-benzyl]-piperidin-4-ol, 1-Phenyl-
 4-[4-(3-piperidin-1-yl-propoxy)-benzyl]-piperazine, Methyl-phenethyl-{1-
 [4-(3-piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-amine, 2-Methyl-1-
 [3-(4-piperidin-1-ylmethyl-phenoxy)-propyl]-piperidine, Methyl-(1-
 methyl-piperidin-4-yl)-[4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, {1-[4-
 20 (3-Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-pyridin-2-yl-(2-
 pyrrolidin-1-yl-ethyl)-amine, 2-{1-[4-(3-Piperidin-1-yl-propoxy)-benzyl]-
 piperidin-4-yl}-ethanol, 1-[3-(4-Pyrrolidin-1-ylmethyl-phenoxy)-propyl]-
 piperidine, 1-{3-[4-(4-Benzylidene-piperidin-1-ylmethyl)-phenoxy]-
 propyl}-piperidine, and Ethyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-
 25 pyridin-4-ylmethyl-amine.

44. A compound of claim 1, selected from: 1-{3-[4-(4-Benzyl-piperidin-1-
 ylmethyl)-phenoxy]-propyl}-piperidine, 2-(4-Chloro-phenyl)-5-[4-(3-
 piperidin-1-yl-propoxy)-benzyl]-2,5-diaza-bicyclo[2.2.1]heptane, 1-[3-
 30 (2'-Piperidin-1-ylmethyl-biphenyl-4-yloxy)-propyl]-piperidine, 1-{1-[4-(3-
 Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-1,3-dihydro-
 benzoimidazol-2-one, 1-(3-{4-[1-(3-Piperidin-1-yl-propyl)-1H-pyrrol-2-yl]-
 phenoxy}-propyl)-piperidine, 1-(3-Phenyl-allyl)-4-[4-(3-piperidin-1-yl-

5 propoxy)-benzyl]-piperazine, [2-(3,4-Dimethoxy-phenyl)-ethyl]-methyl-
 [4-(3-piperidin-1-yl-propoxy)-benzyl]-amine, Methyl-phenethyl-[4-(3-
 piperidin-1-yl-propoxy)-benzyl]-amine, 1-{3-[3-(4-Benzylidene-piperidin-
 1-ylmethyl)-phenoxy]-propyl}-piperidine, 4-(4-Chloro-phenyl)-1-[4-(3-
 10 piperidin-1-yl-propoxy)-benzyl]-piperidin-4-ol, 1-[4-(3-Piperidin-1-yl-
 propoxy)-benzyl]-4-(3-phenyl-propyl)-piperidine, Dimethyl-[4-(3-
 piperidin-1-yl-propoxy)-benzyl]-amine, 1-{1-[4-(3-Piperidin-1-yl-
 propoxy)-benzyl]-piperidin-4-yl}-1H-benzoimidazole, 1-[4-(3-Piperidin-
 1-yl-propoxy)-benzyl]-1,2,3,4,5,6-hexahydro-[2,3']bipyridinyl, 1-{1-[4-(3-
 15 Piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-2,3-dihydro-1H-indole, 1-
 Isopropyl-4-[4-(3-piperidin-1-yl-propoxy)-benzyl]-piperazine, 1-[4-(3-
 Piperidin-1-yl-propoxy)-benzyl]-azacyclotridecane, 1-Methyl-4-[4-(3-
 piperidin-1-yl-propoxy)-benzyl]-piperazine, 5-Bromo-1-{1-[4-(3-
 piperidin-1-yl-propoxy)-benzyl]-piperidin-4-yl}-2,3-dihydro-1H-indole,
 Methyl-phenethyl-[3-(3-piperidin-1-yl-propoxy)-benzyl]-amine, 2-{1-[3-
 20 (4-Piperidin-1-ylmethyl-phenoxy)-propyl]-piperidin-2-yl}-ethanol, 4-[3-
 (4-Piperidin-1-ylmethyl-phenoxy)-propyl]-morpholine, 2-[4-(2-Piperidin-
 1-yl-ethoxy)-benzyl]-1,2,3,4-tetrahydro-isoquinoline, Pyridin-2-yl-[4-(3-
 pyrrolidin-1-yl-propoxy)-benzyl]-amine, 1-[4-(3-Piperidin-1-yl-propoxy)-
 benzyl]-1,2,3,4-tetrahydro-quinoline, [4-(3-Piperidin-1-yl-propoxy)-
 25 benzyl]-pyridin-2-yl-amine, 1-[2-(4-Piperidin-1-ylmethyl-phenoxy)-
 ethyl]-piperidine, Dibenzyl-(3-{2-[4-(3-piperidin-1-yl-propoxy)-phenyl]-
 pyrrol-1-yl}-propyl)-amine, Dimethyl-[3-(4-piperidin-1-ylmethyl-
 phenoxy)-propyl]-amine, Phenyl-[4-(3-piperidin-1-yl-propoxy)-benzyl]-
 amine, and [3-(3-Piperidin-1-yl-propoxy)-benzyl]-pyridin-2-yl-amine.

30 45. A compound of claim 1, selected from: 1-Isopropyl-4-[4-(3-piperidin-1-
 yl-propoxy)-phenyl]-piperazine, 1-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-
 piperazine hydrochloride, 1-Benzyl-4-[4-(3-pyrrolidin-1-yl-propoxy)-

- 5 phenyl]-piperazine, 1-[4-(3-Pyrrolidin-1-yl-propoxy)-phenyl]-piperazine
hydrochloride, and 1-Benzyl-4-[4-(3-piperidin-1-yl-propoxy)-phenyl]-
piperazine.
- 10 46. A compound of claim 26, selected from: 1-[4-(3-Piperidin-1-yl-propoxy)-
phenyl]-piperazine, 1-Isopropyl-4-[4-(3-piperidin-1-yl-propoxy)-phenyl]-
piperazine, 1-Benzyl-4-[4-(3-pyrrolidin-1-yl-propoxy)-phenyl]-
piperazine, and 1-[4-(3-Pyrrolidin-1-yl-propoxy)-phenyl]-piperazine.
- 15 47. A compound of claim 1, selected from: 1-{3-[2'-(1-Isopropyl-piperidin-4-
yl)-biphenyl-4-yloxy]-propyl}-piperidine, 1-(3-{4-[2-(1-Methyl-pyrrolidin-
2-yl)-ethyl]-phenoxy}-propyl)-piperidine, and 1-{3-[4-(1-Isopropyl-
piperidin-4-ylmethyl)-phenoxy]-propyl}-piperidine.
- 20 48. A compound of claim 1, selected from: 1-{3-[4-(1-Methyl-pyrrolidin-2-
yl)-phenoxy]-propyl}-piperidine, 1-Benzyl-4-[4-(3-piperidin-1-yl-
propoxy)-phenyl]-piperidin-4-ol, and 1-Isopropyl-4-[4-(3-piperidin-1-yl-
propoxy)-phenyl]-piperidin-4-ol.
- 25 49. A compound of claim 26, selected from: 1-{3-[4-(1-Methyl-pyrrolidin-2-
yl)-phenoxy]-propyl}-piperidine, and 1-Benzyl-4-[4-(3-piperidin-1-yl-
propoxy)-phenyl]-piperidin-4-ol.
- 30 50. A compound of claim 1, selected from: {3-Furan-2-yl-3-[4-(3-piperidin-
1-yl-propoxy)-phenyl]-propyl}-dimethyl-amine, 4-{3-[4-(3-Piperidin-1-yl-
propoxy)-phenyl]-3-pyrimidin-2-yl-propyl}-morpholine, 4-{4,4,4-
Trifluoro-3-[4-(3-piperidin-1-yl-propoxy)-phenyl]-butyl}-morpholine, and
4-{4,4,4-Trifluoro-3-[4-(3-piperidin-1-yl-propoxy)-phenyl]-butyl}-
morpholine.

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51. A compound of claim 1, selected from: (2-Morpholin-4-yl-ethyl)-[4-(3-piperidin-1-yl-propoxy)-phenyl]-pyridin-2-yl-amine, Isopropyl-(2-morpholin-4-yl-ethyl)-[4-(3-piperidin-1-yl-propoxy)-phenyl]-amine, and (2-Morpholin-4-yl-ethyl)-[4-(3-piperidin-1-yl-propoxy)-phenyl]-thiazol-2-ylmethyl-amine.

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52. A pharmaceutical composition comprising a compound of claim 1, 26, 27, 41, 44 or 47, and a pharmaceutically-acceptable excipient.

53. A compound of claim 1, 26, 27, or 41, isotopically-labelled to be detectable by PET or SPECT.

54. A method of inhibiting histamine H₃ receptor activity in a subject, comprising administering an effective amount of a compound of claim 1, 26, 27, or 41 to a subject in need of such inhibition of histamine H₃ receptor activity.

55. A method of treating a subject having a disease or condition modulated by histamine H₃ receptor activity, comprising administering to the subject a therapeutically effective amount of a compound of claim 1, 26, 27, or 41.

56. A method of claim 55, wherein said disease or condition is selected from the group consisting of sleep/wake disorders, arousal/vigilance disorders, migraine, asthma, dementia, mild cognitive impairment (pre-dementia), Alzheimer's disease, epilepsy, narcolepsy, eating disorders, motion sickness, vertigo, attention deficit hyperactivity disorders,

5 learning disorders, memory retention disorders, schizophrenia, nasal congestion, allergic rhinitis, and upper airway allergic response.

57. A method for treating a disease or condition modulated by at least one receptor selected from the histamine H₁ receptor and the histamine H₃ receptor, said method comprising (a) administering to a subject a jointly effective amount of a histamine H₁ receptor antagonist compound, and (b) administering to the subject a jointly effective amount of a compound of claim 1, 26, 27, or 41, said method providing a jointly therapeutically effective amount of said compounds.

58. The method of claim 57 wherein the histamine H₁ receptor antagonist and the compound of claim 1, 26, 27, or 41 are present in the same dosage form.

59. A method for treating diseases or conditions modulated by at least one receptor selected from the histamine H₂ receptor and the histamine H₃ receptor in a subject, comprising (a) administering to the subject a jointly effective amount of a histamine H₂ receptor antagonist compound, and (b) administering to the subject a jointly effective amount of a compound of claim 1, 26, 27, or 41, said method providing a jointly therapeutically effective amount of said compounds.

60. The method of claim 59 wherein the histamine H₂ receptor antagonist and the compound of claim 1, 26, 27, or 41 are present in the same dosage form.

61. A method for treating one or more disorders or conditions selected from the group consisting of sleep/wake disorders, narcolepsy, and

- 5 arousal/vigilance disorders, comprising administering to a subject a therapeutically effective amount of a compound of claim 1, 26, 27, or 41.
- 10 62. A method for treating attention deficit hyperactivity disorders (ADHD), comprising administering to a subject a therapeutically effective amount of a compound of claim 1, 26, 27, or 41.
- 15 63. A method for treating one or more disorders or conditions selected from the group consisting of dementia, mild cognitive impairment (pre-dementia), cognitive dysfunction, schizophrenia, depression, manic disorders, bipolar disorders, and learning and memory disorders, comprising administering to a subject a therapeutically effective amount of a compound of claim 1, 26, 27, or 41.
- 20 64. A method for treating or preventing upper airway allergic response, nasal congestion, or allergic rhinitis, comprising administering to a subject a therapeutically effective amount of a compound of claim 1, 26, 27, or 41.
- 25 65. A method for studying disorders mediated by the histamine H₃ receptor, comprising using an ¹⁸F-labeled compound of claim 1 as a positron emission tomography (PET) molecular probe.